

Title (en)

METHOD OF MEASURING THE CLEANNES OF STEEL STRIP

Title (de)

VERFAHREN ZUR MESSUNG DER SAUBERKEIT EINES STAHLSTREIFENS

Title (fr)

METHODE DE MESURE DE LA PROPRETE DES BANDES D'ACIER

Publication

EP 2277030 B1 20120516 (FR)

Application

EP 09745595 A 20090312

Priority

- EP 2009052926 W 20090312
- BE 200800270 A 20080514

Abstract (en)

[origin: WO2009138262A1] The present invention relates to an automated in-line method for measuring the surface cleanness of a continuously running metal sheet or strip, characterized by the following steps: a beam of radiation or a particle beam or a spark is focused onto the surface of the running strip, the transmitted power and the focal diameter being chosen so as to obtain a power density sufficient to create a plasma or hot spot which locally etches the metal in the form of a central zone surrounded by a peripheral oxidation ring; the characteristics of a zone encompassing said oxidized ring and possibly said central zone are analyzed by means of an optical image acquisition device and image processing; and an objective value indicative of the surface cleanness is deduced therefrom.

IPC 8 full level

G01N 21/71 (2006.01)

CPC (source: EP US)

G01N 21/718 (2013.01 - EP US); **G01N 21/67** (2013.01 - EP US); **G01N 2021/8887** (2013.01 - EP US); **G01N 2021/8918** (2013.01 - EP US); **G06T 7/0004** (2013.01 - US)

Cited by

CN104977307A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2009138262 A1 20091119; AU 2009248249 A1 20091119; AU 2009248249 B2 20131219; BE 1018132 A3 20100504; BR PI0908615 A2 20160719; BR PI0908615 B1 20190115; CA 2722341 A1 20091119; CA 2722341 C 20160628; CN 102027354 A 20110420; CN 102027354 B 20130515; EP 2277030 A1 20110126; EP 2277030 B1 20120516; ES 2387945 T3 20121004; JP 2011523591 A 20110818; JP 5264995 B2 20130814; US 2011051994 A1 20110303; US 8483474 B2 20130709

DOCDB simple family (application)

EP 2009052926 W 20090312; AU 2009248249 A 20090312; BE 200800270 A 20080514; BR PI0908615 A 20090312; CA 2722341 A 20090312; CN 200980117141 A 20090312; EP 09745595 A 20090312; ES 09745595 T 20090312; JP 2011508846 A 20090312; US 73676709 A 20090312